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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/784,946

02/25/2004

Alex Stolarz

8130.0096

9516

22852

7590

04/07/2006

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EXAMINER

DOONER, CHARLES

ART UNIT

PAPER NUMBER

1772

DATE MAILED: 04/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/784,946

Applicant(s)

STOLARZ ET AL.

Examiner

Charles Dooner

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 26-76 is/are pending in the application.
- 4a) Of the above claim(s) 72 and 73 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26-71 and 74-76 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 26-76 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/25/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claim 26-71 and 74-76, drawn to a multilayered film, classified in class 428, subclass 35.7.
  - II. Claim 72-73, drawn to a process for forming a multilayered film, classified in class 264, subclass 173.12.

The inventions are distinct, each from the other because of the following reasons:

Inventions in Group II and Group I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the process can be used to make multilayered structures with other polymers, such as fluoropolymers.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Steven Scott on March 1, 2006 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-35. Affirmation of this election must be made by applicant in replying to this Office action. Claims 36-42 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### **Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### **Specification**

2. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;

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- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

Applicant makes reference to the merits and speculative application of the invention in Lines 7-9 of the abstract. Appropriate correction is required.

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The phrase "The present invention refers to" is implied by the abstract and is not needed. Appropriate correction is required.

4. The disclosure is objected to because of the following informalities: The word Title is misspelled "Titel" on page 1, Line 4 of the specification.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claim 27, 30-32, 56-57, 60, and 75-76 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regards to Claims 27 and 60, the phrase "from the group" should be followed by the term "consisting of" for the said Claims to appropriately refer to the Markush group. Appropriate correction is required.

In regards to Claims 30-32, the use of the terms "and/or" and "respectively," Claims are unclear as to what whether the compounding temperature refers to the inner layer and the extrusion temperature refers to the material or if both the compounding and extrusion temperature refer to both the inner layer and the material. Correction and/or clarification required.

Claims 56 and 57 recites the limitation "the first component of the outer layer" and "the second component of the outer layer" in Lines 2 of both Claim 56 and 57. There is insufficient antecedent basis for this limitation in the claim. There is no mention of additional components of the out layer in either of the preceding Claims 26 and 53 from which these are dependent claims. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 26-29, 30-71, and 74-76 rejected under 35 U.S.C. 102(b) as being anticipated by Flepp et al. (6555243).

Flepp et al. (6555243) discloses a thermoplastic multilayer composite(Col. 1, Lines 7-8) in the form of a hollow body(Col. 7, Lines 65-67) with one intermediate layer formed on the basis of ethylene/ vinyl alcohol copolymer(Col. 5, Lines 19-21) and at least one inner and outer layer described by Flepp et al. (6555243) as an adhesive layer immediately adjacent to said intermediate layer(Col.6, Lines 25-30). Said inner and outer layers consisting of a polyamide molding composition mixture of polyamide6, polyamide 12, and a compatibilizer(Col. 5, Lines 32-33). The amount of polyamides in the inner and outer layers is between 25-80% by weight of polyamide 6(Col. 5, Lines 60-63), which is within the range of 40-60% (2:3 to 3:2) and 40-50% (2:3 to 1:1) by weight of polyamide 6 in Claims 33 and 34 of the instant invention, respectively. Flepp et al. (6555243) discloses that the compatibilizer in the mixture is preferably up to 30% by weight (30 parts in weight) (Col. 6, Lines 61-63), preferably 5-15% (5 to 15 parts in weight) by weight(Col. 6, Lines 61-63). Flepp et al. (6555243) also discloses the use of rubbers for impact strength modifiers in the polyamide molding compositions(Col. 6, Lines 33-37). These In particular, acid-modified ethylene/ $\alpha$ -olefins copolymers, used as an impact strength modifier, can also be used as a compatibilizer(Col. 6, Lines 50-56). The impact modifiers are described as having elastomer fractions(Col. 6, Lines 40-43) With regards to the intermediate layer, Flepp et al. (6555243) discloses the multilayer composite has at least one intermediate layer comprising ethylene/ vinyl alcohol

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copolymer(Col. 5, Lines 19-21). Also disclosed by reference is the use of copolyamide 6/12 admixed with the ethylene/ vinyl alcohol copolymer to decrease stress cracking which has the advantage of maintaining the barrier effect(Col. 3, Lines 58-63). The inner layer (Col. 6, Line 14) or additional inner layers (Col. 6, Line 17-18) are disclosed as having antistatic agents added so that the inner layer becomes electrically conductive(Col. 6, Lines 13-17). Additional additives such as pigments(Col. 6, Line 67), stabilizers(Col. 7, Line 1), reinforcement agents(Col. 7, Line 1), and flame retardants(Col. 7, Line 1) can also be added to the inner or additional inner layer. Flepp et al. (6555243) also discloses the addition of layered silicates(Col. 7, Line 10) to the ethylene/ vinyl alcohol copolymer(Col. 7, Line 18-20) to increase strength, strain at break, and other mechanical properties(Col. 7, Lines 12-14). The thermoplastic multilayer composite of Flepp et al. (6555243) is disclosed as being in the shape of tubing(Col. 1, Line 14) such as for use in fuel lines(Col. 1, Line 9) and fuel tank inlets (filler neck)(Col. 7, Line 62).

As to Claims 47 and 49-50, Flepp et al. (6555243) inherently teaches the additional intermediate layers with the use of copolyamide 6/12. Flepp et al. (6555243) discloses the composite has can have multiple intermediate layers by the phrase "at least one intermediate layer"(Col. 37-38). It is the position of this examiner that the additional layers can comprise the same or similar compositions to the first intermediate layer described above. Therefore, the additional layer has all the limitations as the first as described above.



Regarding Claims 75 and 76, the applicant is introducing the intended use of the thermoplastic multilayer composite. Therefore, since the claim does not set forth any structure in the product, it is unclear what structure applicant is intending to encompass. A claim is indefinite where it merely recites a use without any structure. Therefore the intended use claims in 75 and 76 are given little patentable weight. MPEP 2173.05(q).

Regarding Claims 30-32, the applicant is introducing process limitations to the product claim, hence, the process claim is given little patentable weight due to the fact that the patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. Therefore the Claims 30-32 are examined only on the merits of the product. MPEP 2113 [R1].

### **Claim Rejections - 35 USC § 103**

8. Claims 40 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flepp et al. (6555243). Flepp et al. (6555243) discloses that the compatibilizer is in a range of 0-30% by weight (0-30 parts by weight) (Col. 6, Lines 61-63). However, Flepp et al. (6555243) fails to teach the entire claimed range, particularly the 30-35% by weight (30-35 parts by weight) of the instant invention.

Therefore, one of ordinary skill in the art at the time the invention was made would have recognized the amount of the compatibilizer in the mixture to 35 parts in

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weight would be optimization through routine experimentation as taught by Flepp et al. (6555243).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the concentration of the mixture of Flepp et al. (6555243) since the claimed range is overlapping the range of Flepp et al. (6555243) and reasons set forth above.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Dooner whose telephone number is (571) 272-1646. The examiner can normally be reached on Monday-Friday from 9:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

*Charles Dooner*

4/3/06

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SUPERVISORY PATENT EXAMINER

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Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Charles Dooner". The signature is fluid and cursive, with the first name "Charles" written in a larger, more prominent script than the last name "Dooner".

Charles Dooner  
Patent Examiner  
Art Unit 1772

4/3/06